Appendix

Pursuant to 37 CFR 1.173 (c) requiring a listing of the status of the claims and for the convenience of the Examiner in this reissue application, the following shows status of the claims and the changes made with this paper to the claims relative to the previously pending claim set.

1.   (Currently Amended) A graphic user interface method for defining a database query output representation operation parameter, the method comprising the steps of:

graphically representing an output representation operation of a database operation on a data set, said graphic representation having a graded representation portion;

receiving from the user a signal representing a user manipulation of [[the]] a grade of the graded representation portion;

translating the manipulation of the graded representation into a database [query definition or output representation] operation parameter [for the database]; and

receiving an output database set from the database in accordance with the database operation parameter, an arrangement of members of the output database set being responsive to manipulation of said graded representation portion by the user.

2.   (Original)   The method according to claim 1, wherein said data set comprises free form text.

3.   (Currently Amended) The method according to claim 1, wherein said user inputs further comprising receiving a database query comprising Boolean search parameters.

4.   (Original)   The method according to claim 1, wherein said graphic representation comprises a bulls'-eye.

5.   (Original)   The method according to claim 1, wherein said graphic representation comprises a pyramid.

6.   (Original)   The method according to claim 1, wherein said manipulation comprises a gesture.

7.   (Original)   The method according to claim 1, wherein said manipulation

comprises selecting a start position within the graded representation portion and subsequently displacing a graphic cursor with respect thereto.

8.   (Currently Amended) The method according to claim 1, further comprising ~~the step of~~ receiving a database operation parameter comprising at least one numerical operator defining an expansiveness of a set inclusion property.

9.   (Original)   The method according to claim 1, wherein said database operation parameter comprises a statistical parameter.

10.   (Original)   The method according to claim 1, wherein said database operation parameter modifies a presentation of results of a Boolean search expression.

11.   (Currently Amended) The method according to claim 1, further comprising ~~the step of~~ receiving a database operation parameter through manipulation of a graded representation portion, which modifies a set inclusion property of a Boolean search expression.

12.   (Currently Amended) The method according to claim 1, further comprising ~~the step of~~ receiving a database operation parameter through manipulation of a graded representation portion, which modifies a non-Boolean search parameter of the database.

13.   (Currently Amended) The method according to claim 1, wherein the [[user]] manipulation comprises a gesture for affecting a relative size, shape or position of the graded representation portion.

14.   (Original)   The method according to claim 1, wherein the database operation parameter comprises an output ranking.

15.   (Currently Amended) The method according to claim 1, further comprising ~~the steps of~~ receiving a further database operation parameter ~~from the user~~ through <u>user</u> manipulation of a graded representation portion, the database operation parameter and further database operation parameter being selected from one or more of the group consisting of a set inclusion property and a set ranking property, which together determine and arrange the output

set.

16.   (Currently Amended) The method according to claim 1, wherein a set inclusion criterion of the output database set is based on an intrinsic characteristic of [[the]] elements of the database, and a ranking of members included in the output set is based on a characteristic extrinsic to the members of the output database set.

17.   (Currently Amended) The method according to claim 1, further comprising the steps of:

receiving [[an]] a database operation parameter to define the output database set;

representing the output database set as a second graphic representation having a graded representation portion;

receiving from the user a user manipulation of the graded representation portion of the second graphic representation; and

translating the manipulation of the graded representation of the second graphic representation into a second database operation parameter for operation on the output database set.

18.   (Currently Amended) The method according to claim 1, wherein said graphically representing [[step]] is adaptive to a style of the user activity regarding the graphic representation.

19.   (Currently Amended) The method according to claim 1, further comprising the step of altering the functioning of the graphic user interface based on preferences of the user, the preference being derived from monitoring [[the]] past activities of the user.

20.   (Currently Amended) The method according to claim 1, further comprising the step of transmitting the database operation parameter through a computer network to a remote database server.

21.   (Previously Presented) The method according to claim 1, wherein:

said graded representation portion comprises at least one graphic control having a [liner] linear depiction; and

said manipulation comprises a movement of a graphic element along the [liner] linear depiction.

22.   (Currently Amended) The method according to claim 1, wherein:

said graded representation portion comprises a plurality of graphic controls, arranged in an array and [[each]] individual ones of the plurality of graphic controls having a linear depiction; and

said manipulation comprises a movement of a graphic element along the linear depictions.

23.   (Currently Amended) The method according to claim 1, wherein the database membership comprises a set of referential data records, [[each]] individual ones of the referential data records having an identifier, and content information, at least a   portion of said set of referential data records being referenced by other data records, further comprising the step of sorting identifiers of the data records included as members of the output database set based on a primary search criterion and an analysis of a relation of references of the database.

24.   (Previously Presented)   A computer readable medium having therein computer instructions for controlling a computer to perform the method of claim 1.

25.   (Currently Amended) A method for using a graphic user interface, comprising:

providing data for display of at least one graded representation portion representing application of an output criterion to a data set;

receiving through the graphic user interface, a query and a signal adapted to control an output arrangement criterion by graphically manipulating at least one representing at least one of a graphic manipulation of the graded representation portion or a query defined based on a graphic manipulation of the graded representation;

determining a query defined based on a graphic manipulation of the graded representation in response to receiving a signal representing the graphic manipulation of the graded representation;

transmitting electronic data representing [[the]] a query and the defined based on a graphic manipulation of the graded representation portion to an automated query response

Reply to Final Office Action mailed December 30, 2009
Response Dated March 29, 2010

Appln. No. 10/728,743
Atty. Dkt. No. 93988

system; and

   receiving a query response set from the automated query response system, <u>the query response set</u> comprising a plurality of items in dependence on the query and having [[a]] <u>an</u> arrangement varying in dependence on [[the]] <u>a second</u> output ~~arrangement~~ criterion derived from the graphic manipulation of the at least one graded representation portion of the output criterion.

26. (Currently Amended) The method according to claim 25, wherein the graded representation portion comprises a scale, wherein ~~a user selects~~ a desired quantitative value <u>is selected</u> based on a manipulation of the scale.

27. (Previously Presented) The method according to claim 25, wherein the automated query response system comprises a search engine.

28. (Previously Presented) The method according to claim 25, wherein the electronic data is transmitted over the Internet.

29. (Previously Presented) The method according to claim 25, wherein the output criterion comprises a sort criterion.

30. (Previously Presented) The method according to claim 25, wherein the output criterion comprises a ranking criterion.

31. (Currently Amended) The method according to claim 25, wherein the graded representation portion comprises ~~both an~~ <u>the</u> output ~~arrangement~~ criterion and a quantitative modifier for a semantic query.

32. (Currently Amended) The method according to claim 25, wherein the automated query response system operates on data records comprising records having links to other data records or records which are linked to by other data records, a ranking of data records represented in the <u>query</u> response <u>set</u> being dependent on the links to or from other data records.

33. (Currently Amended) A <u>non-transitory</u> computer readable physical medium

having stored therein computer instructions for controlling a computer to perform the method of claim 25.

Claims 34-39. (Cancelled)

40.   (Currently Amended) A graphic user interface method ~~for defining database query definition and output representation operation parameters of a database,~~ comprising:

providing signals for graphically representing a predefined icon of the graphic user interface for defining an output representation operation on ~~the data set~~ a database, said icon having a graded representation portion;

receiving ~~from the user~~ a signal representing a user manipulation of the grade of the graded representation portion; and

~~translating the manipulation of the graded representation portion into a database output representation operation parameter for the database; and~~

receiving [[the]] an output database set in accordance with [[the]] a database output representation operation parameter derived from the user manipulation of the graded representation portion, wherein

~~said output receiving receives~~ the output database set is received in accordance with the database output representation operation parameter, and

an arrangement of members of the output database set is dependent on said database output representation operation parameter.

41.   (Currently Amended) The graphic user interface method according to claim 40, ~~wherein~~ further comprising:

providing signals for display a plurality of predefined icons[[, each]] representing [[a]] respective output representation ~~operation~~ operations on the database[[data set are provided.,]];

~~said manipulation receiving receives from the user a~~ receiving signals representing user manipulation of ~~the grade~~ grades of a plurality of graded representation portions;

[[said]] translating ~~translates~~ the manipulation of the grades ~~graded representation portions~~ into a plurality of database output representation operation parameters for the database;

~~said output receiving receives~~ receiving the output database set in accordance with the plurality of database output representation operation parameters, and

wherein an arrangement of members of the output database set is dependent on said plurality of database output representation operation parameters.

42.   (Currently Amended) A graphic user interface method for defining database query definition and output representation operation parameters of a database, comprising:

providing data for display of a graphic representation of graphically representing an output representation operation on the data set from a database, said graphic representation having a plurality of at least a graded representation portions portion;

receiving from the user a signal representing a manipulation of [[the]] a grade of [[a]] the plurality of graded representation portion of portions the graphic representation of the output from the database;

translating the manipulation of the grade graded representations into a plurality of database output representation operation parameter parameters for the database;

determining receiving the an output database set in accordance with the database output representation operation parameters; and

providing data for display representing arranged arranging members of the output database set in dependence on said plurality of database output representation operation parameters.

43.   (Currently Amended) A method for using a graphic user interface, comprising:

defining a query;

receiving from the user, through a pointing device of a graphic user interface[[,]] at least one signal relating to a manipulation of a grade of at least one graded representation portion of a desired output arrangement, the at least one graded representation portion comprising a representation of an output criterion as applied to a data set;

transmitting electronic data representing at least one of a defined query based at least in part on the at least one signal or the manipulation of the grade of the at least one graded representation portion to an automated query response system; and

receiving a response from the automated query response system, the response comprising data representing a plurality of items arranged in dependence on the manipulation of the grade of the at least one graded representation portion and the defined query.

44.　　(Currently Amended) The method according to claim 43, wherein the graded representation portion comprises a plurality of multivalued graphic representations, ~~each being~~ individual ones of the plurality of multivalued graphic representations configured to be separately manipulated through the pointing device ~~by the user~~.

45.　　(Currently Amended) A method ~~for using a graphic user interface,~~ comprising:

~~defining a query;~~

receiving~~, through a graphic user interface,~~ at a server a signal relating to a manipulation of a grade value represented by at least one graded representation portion having at least three states, ~~representing a desired output arrangement~~ the at least one graded representation portion comprising a representation of an output criterion as applied to a data set;

defining a query based at least in part on the signal;

transmitting electronic data representing at least one of the query or the manipulation of the grade value to an automated query response system; and

receiving a response from the automated query response system, the response comprising data representing a plurality of items responsive ~~he defined~~ to the query or the manipulation of the grade value ~~arranged in dependence on the output arrangement criterion~~.

46.　　(Currently Amended) The method according to claim 45, wherein the signal received ~~through the graphic user interface~~ at the server relates to a separate manipulation of a grade value represented by a plurality of graded representation portions.

47.　　(Currently Amended) The method according to claim 25, wherein the at least one graded representation portion comprises a plurality of quantitative graphic representations, ~~each being~~ individual ones of the plurality of quantitative graphic representations configured to be separately graphically manipulated ~~by the user~~.

48.　　(New) The method according to claim 40 further comprising translating the manipulation of the graded representation portion into the database output representation operation parameter for the database.

49.　　(New) A non-transitory computer readable medium having therein computer

instructions configured to control a computing device to perform operations comprising:

provcding data for display of a graphic representation of an output from a database, said graphic representation having at least a graded representation portion;

receiving a signal representing a manipulation of a grade of the graded representation portion of the graphic representation of the output from the database;

translating the manipulation of the grade into a database output representation operation parameter for the database;

determining an output database set in accordance with the database output representation operation parameters; and

providing data for display representing arranged members of the output database set in dependence on said plurality of database output representation operation parameters.

50.   (New) A non-transitory computer readable medium having therein computer instructions configured to control a computing device to perform operations comprising:

receiving through a pointing device of a graphic user interface at least one signal relating to a manipulation of a grade of at least one graded representation portion of a desired output arrangement, the at least one graded representation portion comprising a representation of an output criterion as applied to a data set;

transmitting electronic data representing at least one of a defined query based at least in part on the at least one signal or the manipulation of the grade of the at least one graded representation portion to an automated query response system; and

receiving a response from the automated query response system, the response comprising data representing a plurality of items in dependence on the manipulation of the grade of the at least one graded representation portion.

51.   (New) A non-transitory computer readable medium having therein computer instructions configured to control a computing device to perform operations comprising:

receiving a signal relating to a manipulation of a grade value represented by at least one graded representation portion having at least three states, the at least one graded representation portion comprising a representation of an output criterion as applied to a data set;

defining a query based at least in part on the signal;

transmitting electronic data representing at least one of the query or the manipulation of the grade value to an automated query response system; and

receiving a response from the automated query response system, the response comprising data representing a plurality of items responsive to the query or the manipulation of the grade value.

52.   (New) An apparatus comprising:

a server configured to provide an applet executing in conjunction with a graphic user interface, the applet configured to receive through a pointing device of the graphic user interface a manipulation of a grade of at least one graded representation portion of a desired output arrangement, the at least one graded representation portion comprising a representation of an output criterion as applied to a data set and to transmit electronic data representing at least one of a defined query based at least in part on the at least one signal or the manipulation of the grade of the at least one graded representation portion to the server; and

wherein the server is configured to receive the electronic data from the applet and to send a response comprising data representing a plurality of items in dependence on the manipulation of the grade of the at least one graded representation portion to the applet for presentation in the graphic user interface.